

Appl. No. 10/811,790
Amdt dated May 26, 2006
Reply to Office Action of March 8, 2006

Atty. Ref. 81754.0121
Customer No. 26021

Remarks/Arguments

Reconsideration of this application is requested.

Claim Status

Claims 1-20 are pending. Claims 1, 2, 14, 15 and 20 are amended.

Claim Objections

The informality in claim 1 is corrected as suggested.

Claim Rejections – 35 USC 103

Claims 1, 5-8, 10-11, 14 and 18-20 are rejected under 35 USC 103(a) as obvious over Miyamoto (GB 2292866). Claims 2 and 15 are rejected as obvious over Miyamoto in view of Graham (US 6,424,125). Claims 3, 4, 16 and 17 are rejected as obvious over Miyamoto in view of Graham and Busser (US 6,011,488). Claim 9 is rejected as obvious over Miyamoto in view of Walton (US 4,384,288). Claims 12 and 13 are rejected as obvious over Miyamoto in view of Eberhardt (US 6,404,339).

Claim 1, as amended, recites:

...wherein the means for charging and discharging includes a capacitor that stores a charge according to the rectified voltage and a resistor through which the capacitor supplies a discharge voltage to the secondary battery so as to charge the secondary battery, and a diode that applies the rectified voltage to the capacitor and prevents the charge charged in the capacitor from flowing back to the means for rectifying the induced electromotive force.

Independent claims 14 and 20 include similar recitations. The Action asserts that Miyamoto discloses, in FIGS. 1 and 4, the use of a storage capacitor 19 that stores a charge according to the rectified voltage generated by rectifier 18. The Action further asserts that wire 11a of FIG. 4 provides an inherent resistance to facilitate the charging/discharging operation of capacitor 19, and it would have been obvious to provide a higher resistance at wire 11a with a resistor if needed. However, Miyamoto does not disclose or suggest increasing the resistance of wire 11a, or provide any motivation to add a resistor at wire 11a for any purpose. According to Miyamoto, the purpose of wires 10a and 11a are for providing a means

Appl. No. 10/811,790
Amdt dated May 26, 2006
Reply to Office Action of March 8, 2006

Atty. Ref. 81754.0121
Customer No. 26021

for switching power between rectified voltage at capacitor 19 and battery 1 or 13 as described on page 18, lines 1-8. Moreover, Miyamoto does not disclose or suggest any reason why an adjustment to the resistance of wire 11a would be necessary to carry out this power switching feature. For this reason, applicant respectfully traverses the rejections of independent claims 1, 14 and 20, and submits that they are not rendered obvious by Miyamoto.

In addition, claim 1 is amended to recite "a diode that applies the rectified voltage to the capacitor and prevents the charge charged in the capacitor from flowing back to the means for rectifying the induced electromotive force". Claims 14 and 20 are amended in similar fashion. As shown in FIGS. 1 and 2, diode D is positioned between rectification circuit 15 and the node that connects resistor R and capacitor C to apply the rectified voltage generated by rectification circuit 15 to capacitor C and to prevent the charge charged in capacitor C from flowing back to rectification circuit 15 (specification, paragraph 17).

With respect to claims 2 and 15, the Action asserts that Graham discloses a diode that prevents the charge charged in the capacitor from flowing to a portion other than the second battery. This language was used in original claims 2 and 15. However, claims 1, 14 and 20 as amended recite this limitation in greater detail and require that diode D applies rectified voltage to capacitor C and prevents the charge charged in capacitor C from flowing back to rectification circuit 15. Even though, according to the Action, Graham suggests that a diode is correlated with circuitry to prevent a negative potential from capacitor in col. 3, lines 48-55, Graham fails to disclose or suggest all features as claimed.

For this additional reason, applicant submits that claims 1, 14 and 20 are not rendered obvious by Miyamoto and Graham. Claims 2-13 and 15-19 depend, respectively, from claims 1 and 14. The ancillary references Busser, Walton and Eberhardt do not remedy the deficiencies of Miyamoto and Graham discussed with respect to claims 1 and 14. Accordingly, claims 2-13 and 15-19 are allowable for at

Appl. No. 10/811,790
Amdt. dated May 26, 2006
Reply to Office Action of March 8, 2006

Atty. Ref. 81754.0121
Customer No. 26021


least the same reasons as set forth for claims 1 and 14. The rejections of claims 1-20 under 35 USC 103(a) should be withdrawn.

Conclusion

This application is now in condition for allowance. The Examiner is urged to telephone the undersigned to resolve any issues that remain after entry of this amendment. Any fees due with this response may be charged to our Deposit Account No. 50-1314.

Respectfully submitted,
HOGAN & HARTSON L.L.P.

Date: May 26, 2006

By: 
Troy M. Schmelzer
Registration No. 36,667
Attorney for Applicant(s)

500 South Grand Avenue, Suite 1900
Los Angeles, California 90071
Phone: 213-337-6700
Fax 213-337-6701